#3

SEQUENCE LISTING

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<120> METHOD FOR IDENTIFYING GENES ENCODING SIGNAL SEQUENCES

<130> 09404/032001

<140> US 08/966,269
<141> 1997-11-07

<160> 15

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 517
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (368)...(517)

<400> 1

```
ggggaccgtg tttgtggccc ccaagccggt gccccccatt ttggaactca gcgagtaggg        60
ggcggctctg gggaagtggc agggggcgca gcagctgctg cctccacttc cctagccagg       120
tgctgaagag gatcttcgga gccgctctgg cccccaggcg ctggatgact ggcaccagcg       180
ctcctcgcac ctgtgttggt gtgtgagact tgggctggag tgcccacgtg gctgtggagt       240
cagtgtgatt catgattgag gaaacgcgtc ctccatcctc tctctccttg gcactttcca       300
cacatgagga gaagaagagc ttctgtttag aagacacgtg cccagagtca gaggcccctt       360
gcccacc atg aag gga acc tgt gtt ata gca tgg ctg ttc tca agc ctg          409
        Met Lys Gly Thr Cys Val Ile Ala Trp Leu Phe Ser Ser Leu
          1               5                  10

ggg ctg tgg aga ctc gcc cac cca gag gcc cag ggt acg act cag tgc          457
Gly Leu Trp Arg Leu Ala His Pro Glu Ala Gln Gly Thr Thr Gln Cys
 15                  20                  25                  30

cag aga aca ctc gag gtg aat att gtt tcc ccc agc tcc aag gca aca          505
Gln Arg Thr Leu Glu Val Asn Ile Val Ser Pro Ser Ser Lys Ala Thr
                35                  40                  45

ttc agt cca agt                                                         517
Phe Ser Pro Ser
             50
```

<210> 2
<211> 50
<212> PRT
<213> Homo sapiens

<400> 2

```
Met Lys Gly Thr Cys Val Ile Ala Trp Leu Phe Ser Ser Leu Gly Leu
 1               5                  10                  15
Trp Arg Leu Ala His Pro Glu Ala Gln Gly Thr Thr Gln Cys Gln Arg
            20                  25                  30
Thr Leu Glu Val Asn Ile Val Ser Pro Ser Ser Lys Ala Thr Phe Ser
        35                  40                  45
Pro Ser
    50
```

<210> 3
<211> 506
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (132)...(506)

<400> 3

```
ttcttcctag tttctttttc ggcacaatat ttcaagttat accaagcata caatcaactc       60
ccaagttggg atccgaattc ggcacgagcg gcacgagttg tgcttcggag accgtaagga      120
tattgatgac c atg aga tcc ctg ctc aga acc ccc ttc ctg tgt ggc ctg        170
             Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu
               1               5                  10

ctc tgg gcc ttt tgt gcc cca ggc gcc agg gct gag gag cct gca gcc         218
Leu Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala
    15                  20                  25

agc ttc tcc caa ccc ggc agc atg ggc ctg gat aag aac aca gtg cac         266
Ser Phe Ser Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His
30                  35                  40                  45

gac caa gag cat atc atg gag cat cta gaa ggt gtc atc aac aaa cca         314
Asp Gln Glu His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Pro
                50                  55                  60

gag gcg gag atg tcg cca caa gaa ttg cag ctc cat tac ttc aaa atg         362
Glu Ala Glu Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met
            65                  70                  75

cat gat tat gat ggc aat aat ttg ctt gat ggc tta gaa ctc tcc aca         410
His Asp Tyr Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr
        80                  85                  90

gcc atc act cat gtc cat aag gag gaa ggg agt gaa cag gca cca ctc         458
Ala Ile Thr His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu
    95                  100                 105

gag gtg aat att gtt tcc ccc agc tcc aag gca aca ttc agt cca agt         506
Glu Val Asn Ile Val Ser Pro Ser Ser Lys Ala Thr Phe Ser Pro Ser
110                 115                 120                 125
```

<210> 4

<211> 125
<212> PRT
<213> Homo sapiens

<400> 4

```
Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu Trp Ala
 1               5                  10                  15
Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala Ser Phe Ser
            20                  25                  30
Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His Asp Gln Glu
        35                  40                  45
His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Pro Glu Ala Glu
    50                  55                  60
Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His Asp Tyr
65                  70                  75                  80
Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala Ile Thr
                85                  90                  95
His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu Glu Val Asn
            100                 105                 110
Ile Val Ser Pro Ser Ser Lys Ala Thr Phe Ser Pro Ser
        115                 120                 125
```

<210> 5
<211> 32
<212> PRT
<213> Mus musculus

<400> 5

```
Met Lys Gly Ala Cys Ile Leu Ala Trp Leu Phe Ser Ser Leu Gly Val
 1               5                  10                  15
Trp Arg Leu Ala Arg Pro Glu Thr Gln Asp Pro Ala Lys Cys Gln Arg
            20                  25                  30
```

<210> 6
<211> 45
<212> PRT
<213> Homo sapiens

<400> 6

```
Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His Asp Tyr
 1               5                  10                  15
Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala Ile Thr
            20                  25                  30
His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu
        35                  40                  45
```

<210> 7
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 7

ctcgagctca gagaatcagc aactgtga 28

<210> 8
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 8
agatcttcat acttttctca tgttgatttt cc 32

<210> 9
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 9
ctcgaggtga atattgtttc ccccagctc 29

<210> 10
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 10
ctcgaggata atggtgaata ttgtttcccc cagctc 36

<210> 11
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<221> primer
<222> (11)...(16)
<223> where "n" at positions 11-16 is any one of A, T, G, or C

<400> 11
ctgactcgag nnnnnn 16

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> primer

<400> 12
gagcaacggt atacggcctt cctt 24

<210> 13
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 13
gggatatgcc ccattatcca tc 22

<210> 14
<211> 32
<212> PRT
<213> Homo sapiens

<400> 14
Met Lys Gly Thr Cys Val Ile Ala Trp Leu Phe Ser Ser Leu Gly Leu
1 5 10 15
Trp Arg Leu Ala His Pro Glu Ala Gln Gly Thr Thr Gln Cys Gln Arg
20 25 30

<210> 15
<211> 108
<212> PRT
<213> Homo sapiens

<400> 15
Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu Trp Ala
1 5 10 15
Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala Ser Phe Ser
20 25 30
Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His Asp Gln Glu
35 40 45
His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Glu Ala Glu Met
50 55 60
Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His Asp Tyr Asp
65 70 75 80
Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala Ile Thr His
85 90 95
Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu
100 105